

TACOMA PIERCE COUNTY HEALTH DEPARTMENT
3629 SOUTH D STREET
TACOMA, WASHINGTON 98408

Because of the importance of today's hearing, the Tacoma-Pierce County Health Department is sponsoring a special study to learn what people think of the proposed arsenic emission standards and other related issues. As part of this study, you can help us by filling out the attached questionnaire while you are at the hearing and leaving it with us before you go. It only takes about ten minutes or less to complete the questionnaire, so you should be able to easily finish it while you are listening or waiting to speak today.

To make it easiest to collect the questionnaire after you have completed it, we have placed boxes at the exit to the hearing room and the pavilion. Please look for the boxes and just drop your form in before you leave the building.

If you need something to write with or have any questions related to this study, you can ask one of the people distributing the questionnaires and they will be glad to help. If you are interested in finding out the results when the study is finished, they will be available at the Health Department as soon as possible after the hearing. So that your answers will be strictly confidential, please do not put your name or address on the form.

Your ideas and opinions are important to us, and your help in this study will be greatly appreciated. Thank you for your time and for your comments.

Sincerely,

R. M. Nicola, M.D.

R.M. Nicola, M.D., Director of Health
Tacoma-Pierce County Health Department

USEPA SF



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To complete this form please write your answers on the lines following the questions, or circle the numbers next to the choices that are nearest your opinions. Please circle only one number for each question, and be sure to answer all of the questions. (The purpose of the numbers is simply to make it easier to analyze the result of the study.)

1. How many years have you lived in the Tacoma - Puget Sound area? _____ years

2. How many years have you lived at your present address? _____ years

3. How close is your home to the ASARCO smelter? _____ miles.
(If it is less than one mile please estimate as a fraction of a mile, for example 1/2 or 1/4.)

4. What direction do you live from the smelter? Please pick the direction that best tells how you would go to get from the smelter to your home if you could travel in a straight line. (Please circle the number to the left of the proper direction. If you do not know the direction, circle # 9.)

1 - north 2 - northeast 3 - northwest 4 - east
5 - south 6 - southeast 7 - southwest 8 - west 9 - Don't Know

The next questions ask for your opinion about the effects of the emissions from the ASARCO smelter, and the Environmental Protection Agency's (EPA) proposed emission control standards.

5. Do you feel the ASARCO smelter is a health hazard to you personally?
(circle the number to the left of your answer)

1 - Yes 2 - No 9 - Don't Know

6. In your opinion, do the EPA's proposed standards for arsenic emissions provide an ample margin of safety to protect the public health? (circle number)

1 - Yes 2 - No 9 - Don't Know

7. Would you favor stronger controls than the EPA has proposed?

1 - Yes 2 - No 9 - Don't Know

8. Would you favor stronger controls than the EPA has proposed even if it means the smelter would have to close and eliminate jobs?

1 - Yes 2 - No 9 - Don't Know

9. About what percentage of the population of the Tacoma - Puget Sound area do you think would agree with your answers to the questions above? _____ %
(Please give an answer between 0% - 100%. For example, a 0% answer would mean you think nobody else in the area would agree with your answer. A 100% answer to this question would mean you think everyone in the area would agree with your answers to the questions above.)

10. Do you think the real risks from the smelter's arsenic emissions are higher, lower, or equal to the EPA estimates? (circle the number to the left of the statement you most agree with) The real risks from arsenic are:

- 1 - Very Much Lower than EPA says
- 2 - Somewhat Lower than EPA says
- 3 - About The Same As EPA says
- 4 - Somewhat Higher than EPA says
- 5 - Very Much Higher than EPA says
- 9 - Don't Know

11. Compared to the level of risk EPA estimates say would be allowed, how much risk do you think should be allowed by the arsenic standards?

- 1 - Very Much Less Risk Should Be Allowed
- 2 - Somewhat Less Risk Should Be Allowed
- 3 - About The Same Level of Risk Should Be Allowed
- 4 - Somewhat More Risk Should Be Allowed
- 5 - Very Much More Risk Should Be Allowed
- 9 - Don't Know

12. Considering all of the benefits and all of the harmful effects which you think the smelter might have, how do you think the overall benefits of the smelter compare with its overall harm to the community?

- 1 - The Harm Is Much Greater Than the Benefits
- 2 - The Harm Is Somewhat Greater Than the Benefits
- 3 - The Effects are About Equal
- 4 - The Benefits are Somewhat Greater Than the Harm
- 5 - The Benefits are Much Greater Than the Harm
- 9 - Don't Know

The next group of items are not all specifically about the smelter or the proposed arsenic standards, but they will help us understand how you feel about these kinds of issues in general. Please circle the number below the comment which best describes how you feel about each of the statements that follow.

13. "Pollution control laws should not require industries to do more than they can afford with the best available technology." (Circle the number below the comment that best describes how you feel about this statement)

Disagree	Disagree	Neither	Agree	Agree	Don't
Strongly	Somewhat	Disagree nor Agree	Somewhat	Strongly	Know
1	2	3	4	5	9

14. "If the government did not pass tough laws, industries would not do enough to control pollution on their own."

Disagree	Disagree	Neither	Agree	Agree	Don't
Strongly	Somewhat	Disagree nor Agree	Somewhat	Strongly	Know
1	2	3	4	5	9

15. "Most pollution controls cost more than they are worth to our society." (circle the number that best describes how you feel about the statement)

Disagree	Disagree	Neither	Agree	Agree	Don't
Strongly	Somewhat	Disagree nor Agree	Somewhat	Strongly	Know
1	2	3	4	5	9

16. "The natural resources of the Earth are being destroyed and used too fast."

Disagree	Disagree	Neither	Agree	Agree	Don't
Strongly	Somewhat	Disagree nor Agree	Somewhat	Strongly	Know
1	2	3	4	5	9

17. "Anyone who wants to can choose whether or not to be exposed to emissions from the ASARCO smelter."

Disagree	Disagree	Neither	Agree	Agree	Don't
Strongly	Somewhat	Disagree nor Agree	Somewhat	Strongly	Know
1	2	3	4	5	9

18. "People who can choose whether or not to be exposed to risks should be allowed to take greater risks than people who don't have a choice."

Disagree	Disagree	Neither	Agree	Agree	Don't
Strongly	Somewhat	Disagree nor Agree	Somewhat	Strongly	Know
1	2	3	4	5	9

19. "Government agencies should not wait for absolute proof that something is harmful. If there is any evidence at all that something might be harmful, the government should act to protect the public."

Disagree	Disagree	Neither	Agree	Agree	Don't
Strongly	Somewhat	Disagree nor Agree	Somewhat	Strongly	Know
1	2	3	4	5	9

20. "I am sure I will not get cancer caused by chemicals, pesticides or any other form of environmental pollution."

Disagree	Disagree	Neither	Agree	Agree	Don't
Strongly	Somewhat	Disagree nor Agree	Somewhat	Strongly	Know
1	2	3	4	5	9

21. "I am sure I will not get cancer caused by emissions from the smelter."

Disagree	Disagree	Neither	Agree	Agree	Don't
Strongly	Somewhat	Disagree nor Agree	Somewhat	Strongly	Know
1	2	3	4	5	9

22. "I think it is an excellent idea for the EPA to have hearings like this before it establishes emissions standards."

Disagree	Disagree	Neither	Agree	Agree	Don't
Strongly	Somewhat	Disagree nor Agree	Somewhat	Strongly	Know
1	2	3	4	5	9

The next two questions will help us learn how much information people have about the proposed standards.

23. According to EPA estimates, if the proposed standards are put into effect, what would the estimated lifetime risk of lung cancer be to the 1000 people living closest to the plant? In other words, of the 1000 people who live nearest to the smelter, how many may get lung cancer due to the arsenic emissions from the smelter. (If you are not sure about this, please write your best guess of the answer. This is not a question of whether you agree with the EPA estimate, just of what the estimate is.) _____

24. Do the standards proposed by the EPA set an ambient air standard? In other words, do they set a level of arsenic in the air around the smelter that could not be exceeded?

1 - Yes 2 - No 9 - Don't Know

The last questions below will allow us to compare the people who attended this hearing with the rest of the population of this area.

25. What is your zip code? _____

26. Is your present age between
- 1 - 0 to 18 years
 - 2 - 18 to 25 years
 - 3 - 25 to 30 years
 - 4 - 30 to 40 years
 - 5 - 40 to 50 years
 - 6 - 50 to 60 years
 - Older than 60 years

27. On a scale of 1 to 5, with 5 being excellent and 1 being very poor, how would you rate your present health? 1 2 3 4 5

28. What is your sex? 1 - Male
 2 - Female

29. Do you have any children? 1 - Yes
 2 - No
 If yes, How many? _____

30. Is your yearly family income between (please circle number on left of the range that includes your income level)

- 1 - \$ 0 to \$14,999
- 2 - \$15,000 to \$39,999
- 3 - \$40,000 or more

31. Have you or any members of your family ever been employed by the smelter?
 1 - Yes 2 - No 9 - Don't Know

32. How often do you read the news or editorial sections of the newspaper?
 1 - Almost Every Day 2 - Several Times A Week 3 - Once a week
 4 - Several Times A Month 5 - Very Rarely 6 - Never

33. Did you attend any of the workshops that were held in August?
 1 - Yes 2 - No

34. Did you give spoken testimony at the hearing today?
 1 - Yes 2 - No

35. Do you feel like the public was given enough information about this issue?
 1 - Yes 2 - No 9 - Don't Know

36. What do you think could be done to better inform the public about issues like this?

* * * * Remember to put this in the box as you go out. * * * *

THANK YOU

JOHN SPELLMAN
Governor



DONALD W. MOOS
Director

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

7272 Cleanwater Lane, LU-11 • Olympia, Washington 98504 • (206) 753-2353

November 4, 1983

Mr. A. B. Berg
Industrial Mineral Products, Inc.
P. O. Box 95
Ravensdale, Washington 98051

Subject: ASARCO Slag, IMP Slag Processing at ASARCO, Tacoma Industry

Dear Mr. Berg:

On a recent boat inspection of Commencement Bay, our inspector noted that processed slag material was spilling into the adjacent water. This letter is your notification that spilling or filling in navigable waters is illegal without a permit. I trust that this has not been intentional and that the spilled material will immediately be removed from the water and you will prevent this problem in the future.

On another matter, I am currently finalizing my report on slag and find I have limited information on the ultimate uses of slag. Could you please send me a description of present uses of slag material, including:

1. Origin of product (granulated or pancaked slag).
2. Approximate amount (percent based on total annual output).
3. Where most of product type is marketed.
4. Price per unit of product.
5. A complete description of your production processes.
6. Marketing name of product.

I am also interested in your future marketing plans for slag products. All of the above will be helpful in my review of ASARCO's newly processed granulation proposal and, as I said, aid in my definitive report on slag. Any additional information would also be appreciated.

I am planning to visit ASARCO the week of November 6 and expect to gather water samples from ASARCO's granulation pond and generally inspect the slag processing area. If you would like to escort me on this inspection, I would be happy to have you along (let me know as soon as possible). My telephone number in Olympia is (206) 753-0141.

Sincerely,

A handwritten signature in dark ink, appearing to read "Richard Pierce".

Richard Pierce
Regional Engineer

RP:si

cc: Tom White, ASARCO, Tacoma
Jim Krull, Department of Ecology-Headquarters